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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,327	03/10/2006	Ola Fagrell	12466	1586

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ROBERTS MLOTKOWSKI SAFRAN & COLE, P.C.  
Intellectual Property Department  
P.O. Box 10064  
MCLEAN, VA 22102-8064

EXAMINER
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GRAY, JILL M

ART UNIT	PAPER NUMBER
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1794

NOTIFICATION DATE	DELIVERY MODE
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12/29/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/538,327	<b>Applicant(s)</b> FAGRELL ET AL.	
	<b>Examiner</b> Jill Gray	<b>Art Unit</b> 1794	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 23, 2009 has been entered.

2. Pursuant to the entry of the amendment of November 23, 2009, the status of the claims is as follows: Claims 1-10 and 12 are pending. Claim 11 has been cancelled. Claim 1 is amended.

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-4, 7-10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent Publication EP 0961295 A (Cogan) in view of DeNicola, Jr. 5,047,446 (DeNicola) for reasons of record.

Cogan discloses a coaxial cable comprising an inner electrical conductor and a dielectric insulation comprising an inert gas and a solid, wherein said solid can be a polymer such as propylene homo- or copolymer and method of making said cable. See abstract and [0022]]. Cogan does not teach that the propylene polymer has strain

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hardening behavior or that component (A) is produced by treatment of unmodified propylene polymer with thermally decomposing, radical forming agents.

DeNicola teaches a propylene polymer material having strain hardening behavior that can be used as wire and cable coating. In addition, DeNicola teaches that the propylene can be blended with other propylene homo- or copolymer materials, as required by claims 1 and 2. See entire document and for example, column 9, lines 5-10.

Cogan and DeNicola each teach propylene homo- or copolymer polymers that are used in the formation of cables wherein the propylene homo- or copolymer polymers are used as insulation or coating material. Thus, Cogan and DeNicola are analogous art.

As set forth previously, Cogan teaches that his cable comprises a conductor coated with a dielectric insulation such as propylene homo- or copolymer, but does not specifically teach a propylene polymer having strain hardening behavior. Cogan teaches polypropylene as a material having outstanding electrical properties, further teaching that the insulation preferably has a uniform cell distribution. Note page 3.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Cogan by forming the dielectric insulation layer by using a material having superior electric properties such as a polypropylene material, wherein said polypropylene material is a propylene homo- or copolymer as taught by DeNicola, with the reasonable expectation of success of

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forming a cable having a dielectric layer with superior electric properties and more uniform cell size and enhanced stability in the presence of oxygen.

Regarding properties such as the strain hardening behavior with the requisite haul-off force and draw-down velocity, and melt flow rate (claims 1 and 7), the copolymer of the prior art is substantially similar to that contemplated by applicants. It is the examiner's position that products of identical chemical composition can not have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Note MPEP 2112.01. Therefore, the examiner has reason to believe that the prior art copolymer results in properties that are substantially the same as and render obvious those of the instant invention, in the absence of factual evidence to the contrary.

As to the requirement that the propylene homo-or copolymer is produced by treatment of unmodified propylene polymer with thermally decomposing, radical forming agents, this limitation is drawn to the process of making the propylene homo- or copolymer, which constitutes a process limitation within a product claim. "Even though product-by-process claims are limited by an defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is

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the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” See MPEP 2113.

Regarding claims 3 and 4, it would have been obvious to the skilled artisan during routine experimentation to purify the propylene polymer to remove entrained catalyst. Accordingly, the limitations of present claims 3 and 4 are not construed to be a matter of invention in the absence of factual evidence of unexpected or superior properties of the resultant cable, whereby said properties are directly related to the claimed critical catalyst residue.

Regarding claims 8-10, Cogan teaches an expanded dielectric layer and that the nucleating agents can be added in an amount ranging from about 0.01 to about 5 percent by weight. In addition, Cogan teaches that the degree of expansion can be at least 60%. See pages 3 and 5.

Therefore, the combined teachings of Cogan and DeNicola would have rendered obvious the invention as claimed in present claims 1-4, 7-10 and 12.

5. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent Publication EP 0961295 A1 (Cogan) in view of DeNicola, Jr. 5,047,446 as applied above to claims 1-4, 7-10, and 12, further in view of European Patent Publication EP 0634,454 A1 (Comer), for reasons of record.

Cogan and DeNicola are as set forth above. Though DeNicola teaches that his propylene can be mixed with other propylene or ethylene homo or copolymers, he is silent as to the specific amounts.

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Comer teaches a polyolefin composition comprising a propylene polymer having strain hardening behavior present in an amount of from 5 to 95% by weight and a non-strain hardening behavior propylene polymer present in an amount of from 95 to 5% by weight having improved thermoformability. Comer teaches that compositions containing strain hardening behavior propylene and at least 50 wt% of a non-strain hardening behavior propylene are known in the art. It would have been obvious to one having ordinary skill in the art to form a blend of a strain hardening propylene and a non-strain hardening propylene as taught by DeNicola, wherein the non-strain hardening propylene is present in an amount of at least 50 wt% as taught by Comer to achieve the predictable results of obtaining a polymer having good mechanical properties and thermoformability. As to the ratio of components, since the result sought and the ingredients used were known, it was within the expected skill of one having ordinary skill in this art to arrive at the optimum proportion of those ingredients, during routine experimentation.

Therefore, the combined teachings of Cogan, DeNicola, and Comer would have rendered obvious the invention as claimed in present claims 5-6.

### ***Response to Arguments***

6. Applicant's arguments filed November 23, 2009 have been fully considered but they are not persuasive.

More specifically, applicants' argument that the polymers according to claim 1 of the present invention and DeNicola, Jr. are not substantially identical and thus the haul-off force and draw-down velocity as required by claim 1 of the present application

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cannot be said to be inherently met by DeNicola Jr. has been addressed above in this Office Action. The examiner reiterates that there is no factual evidence on this record that the haul-off force and draw-down velocity of DeNicola are not the same as that of the present application.

Applicants argue that the skilled artisan would not combine Cogen with DeNicola, Jr. as DeNicola, Jr. and Comer does not relate to the dielectric properties of the polymers disclosed, and that the polymers according to DeNicola, Jr. and Comer have inferior properties compared with the polymers of the according to the present invention.

Again, as set forth above, there is no clear factual evidence on this record that the properties of the prior art are inferior to those of the present invention.

Applicants argue Comer fails to cure the deficiencies of Cogan and DeNicola, Jr. and is directed to the mechanical properties of polymers and is not concerned with electrical properties.

In this regard, Comer is relied upon for all that he would have reasonably conveyed to one having ordinary skill in this art at the time the invention was made, namely, that polyolefin compositions containing strain hardening behavior propylene and at least 50 wt% of a non-strain hardening behavior propylene are known in the art. Cogen establishes that materials having outstanding electrical properties such as polypropylene are desirable.

No claims are allowed.



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill Gray whose telephone number is 571-272-1524.

The examiner can normally be reached on M-Th and alternate Fridays 10:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jill Gray/  
Primary Examiner  
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jmg